



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,779	09/15/2003	Kent E. Peterson	NORTE-500A	2186

7590 04/28/2005  
Bruce B. Brunda  
STETINA BRUNDAGARRED & BRUCKER  
Suite 250  
75 Enterprise  
Aliso Viejo, CA 92656

EXAMINER

JONES, STEPHEN E

ART UNIT	PAPER NUMBER
----------	--------------

2817

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/662,779	<b>Applicant(s)</b> PETERSON, KENT E.	
	<b>Examiner</b> Stephen E. Jones	<b>Art Unit</b> 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 9-17 and 25-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 18-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-33 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/15/03</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of species I (Fig. 2) in the reply filed on 3/22/05 is acknowledged. The traversal is on the ground(s) that the species would not present a serious burden. This is not found persuasive because the numerous nonobvious variants between the species presents a burden in both search and examination. Also, it is MPEP 809.02 (a) which describes the proper format of a species restriction as the examiner has presented in the restriction requirement.

The requirement is still deemed proper and is therefore made FINAL.

Accordingly, Claims 9-17 and 25-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 3/22/05.

### ***Claim Objections***

1. Claim 1 is objected to because of the following informalities:

On line 13, the phrase "to said" is written twice consecutively.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2817

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5 and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by White.

White teaches an interconnect including: first and second conductive transmission lines having tapered steps and the other edges are parallel in the same manner as the present invention (Claim 4, 20, 21); inherently the narrowing line width increases the impedance of the line as is a fundamental property of transmission lines (Claim 3); conductive wires are connecting the transmission lines at equally spaced intervals (i.e. terminals) (see Fig. 1) (Claims 2, 5, 19); ports (Pout, Pin) are provided to the transmission lines (Claim 1); and inherently the interconnection functions equivalently to the present invention, especially since it structurally the same as the presently claimed structure (Claim 18).

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6-8 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over White in view of Osterwalder and Applicant's admitted prior art Fig. 1 (AAPA).

White teaches an interconnection having tapered stepped lines as described above (Claims 8, 24). However, White does not explicitly teach that the two

transmission lines are on two substrates along edges with a gap in between (Claims 6, 22) with the interconnect element bondwires spanning the gap (Claims 7, 23).

Osterwalder teaches a similar interconnect structure to White and teaches using separate substrates for the two transmission lines (e.g. see Col. 2, lines 40-46).

The AAPA teaches providing interconnections along the edge of the substrates with the wires across the gap.

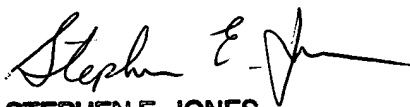
It would have been considered obvious to one of ordinary skill in the art to have provided the two White transmission lines on separate substrates (instead of a single substrate) such as taught by Osterwalder and having the lines along the edge interconnected with bondwires across the gap such as taught by AAPA, because it would have been a mere selection of a well-known art-recognized equivalent/alternative interconnection means between the two transmission lines while providing the advantage of multiple substrates for providing more mounting space for other circuit components when needed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen E. Jones whose telephone number is 571-272-1762. The examiner can normally be reached on Monday through Friday from 8 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2817

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**STEPHEN E. JONES**  
**PRIMARY EXAMINER**

SEJ